

# Stomp Rockets

March 2019 Family Science Lab

Green Bank Observatory Science Center

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First, we have to build a **launcher**. Our launcher will work by forcing a lot of air out of a soda pop bottle and into a pipe. When all the air rushes out of the pipe, it will take the rocket with it!

To build a launcher, you will need:

- 🚀 PVC pipe
- 🚀 Duct tape
- 🚀 A two-liter soda pop bottle.

Tape the pipe to the mouth of the bottle. Make sure it's airtight! If the air can escape, it won't push your rocket up, up, and away!

Now that you have your launcher ready, it's time to make your rocket. Decorate the rocket on the next page. It's a good idea to print it out on cardstock or construction paper.

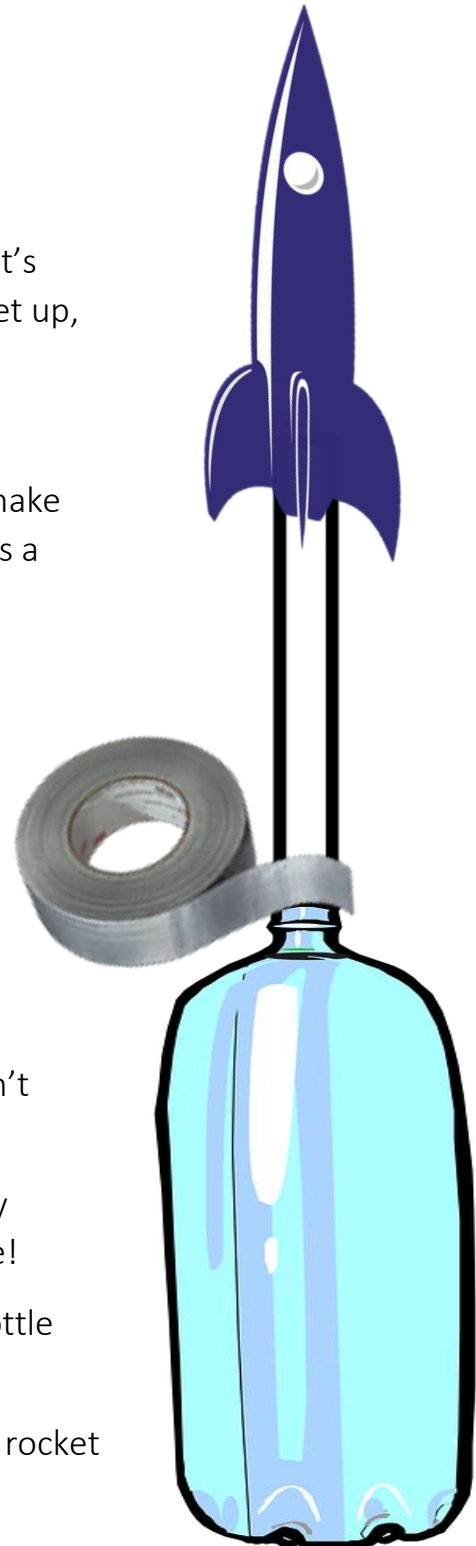
**Do not cut any of the dotted lines!** The three polygons on the left side of the page are your fins. You can fold along the dotted lines, and then tape them on the body of your rocket.

Once your rocket is decorated and the fins are attached, roll it into a tube around your pipe to make sure it fits, and tape it loosely—not too tight! Tape over the top of the rocket as well, so that air can't escape.

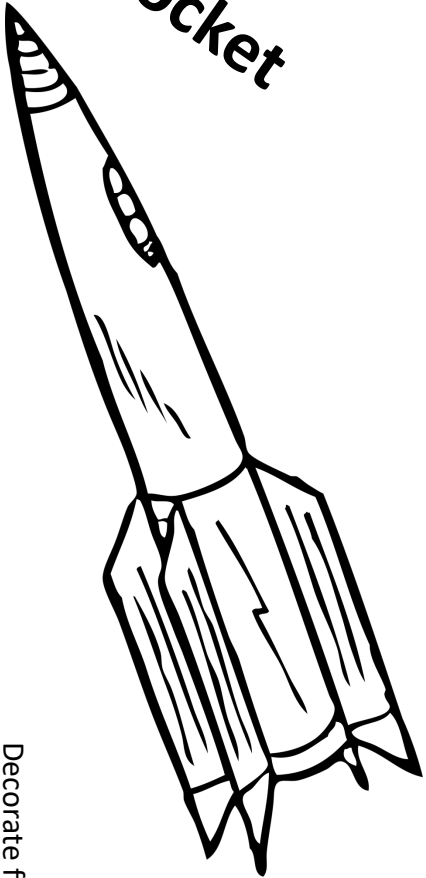
Then, set the bottle on the ground, aim the pipe away from any people, count down, and jump on the bottle!

If you want to go again, have an adult reinflate the bottle by blowing into the pipe.

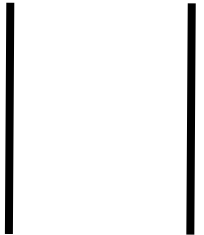
**Experiment with angles!** Which angle will make your rocket go the farthest? The highest?



# Stomp Rocket



Decorate above this dotted line. DO NOT CUT!



Decorate fins and cut out on solid lines. Discard shaded areas. Fold  
Fins on dashed lines and attach to lines on rocket body.

